

WHAT IS CLAIMED IS:

1. A bicycle control cable fixing device adapted to be coupled to a bicycle component, said bicycle control cable fixing device comprising:

a support member with a first cable engagement surface; and

a cable fixing member non-threadedly supported on said support member to rotate about a rotation axis, said cable fixing member having a second cable engagement surface,

said cable fixing member and said support member being arranged and configured such that an inner wire of a bicycle control cable is secured between said first and second cable engagement surfaces in response to rotational movement of said cable fixing member to a cable fixing position from a cable release position.

2. The bicycle control cable fixing device according to claim 1, wherein said cable fixing member includes a cam portion rotatably supported by said support member and an elongated lever portion extending radially outwardly from said cam portion relative to said rotation axis, said cam portion having said second cable engagement surface.

3. The bicycle control cable fixing device according to claim 2, wherein said support member includes a base portion adapted to be coupled to the bicycle component and a pair of axially spaced mounting portions extending from said base portion with said cam portion of said cable fixing member rotatably supported between said mounting portions.

4. The bicycle control cable fixing device according to claim 3, wherein said cam portion includes a pair of axial end surfaces and a peripheral cam surface concentrically arranged relative to said rotation axis and extending between said axial end surfaces, and

said base portion includes a peripheral retaining surface disposed relative to said peripheral cam surface to retain said cable fixing member relative to said support member when in said cable fixing position and the inner wire is retained between said support member and said cable fixing member.

5. The bicycle control cable fixing device according to claim 4, wherein

said peripheral retaining surface of said base portion includes said first cable engagement surface, and

said peripheral cam surface of said cam portion includes said second cable engagement surface.

6. The bicycle control cable fixing device according to claim 5, wherein at least one of said peripheral retaining surface and said peripheral cam surface includes a groove adapted to at least partially receive the inner wire of the control cable therein.

7. The bicycle control cable fixing device according to claim 5, wherein said peripheral retaining surface and said peripheral cam surface are arranged and configured to form a space therebetween when said cable fixing member is located in said cable fixing position, said space being configured to be smaller than a transverse dimension of the inner wire of the control cable such that the inner wire is squeezed between said peripheral retaining surface and said peripheral cam surface to non-movably couple the inner wire to said bicycle control cable fixing device when said cable fixing member is moved to said cable fixing position from said cable release position.

8. The bicycle control cable fixing device according to claim 5, wherein said cam portion of said cable fixing member is rotatably mounted on a pivot pin that extends between said mounting portions of said support member.

9. The bicycle control cable fixing device according to claim 4, wherein at least one of said mounting portions includes an axial retaining surface forming said first cable engagement surface and disposed opposite to one of said axial end surfaces, which forms said second cable engagement surface, said axial retaining surface being spaced from said axial end surface by a distance to squeeze the inner wire therebetween.

10. The bicycle control cable fixing device according to claim 9, wherein said peripheral cam surface is configured and arranged to contact said peripheral retaining surface when said cable fixing member is located in said cable

fixing position to frictionally prevent movement of said cable fixing member about said rotation axis.

11. The bicycle control cable fixing device according to claim 10, wherein said at least one of said mounting portions having said axial retaining surface includes a wire receiving hole that is offset from said rotation axis, and said cam portion includes a wire receiving bore that is aligned with said wire receiving hole when said cable fixing member is located in said cable release position.

12. The bicycle control cable fixing device according to claim 9, wherein said cam portion is freely rotatably mounted on a pivot pin that extends between said mounting portions of said support member.

13. The bicycle control cable fixing device according to claim 4, wherein each of said mounting portions of said support member includes an axial retaining surface disposed opposite to one of said axial end surfaces of said cam portion, said axial retaining surfaces forming said first cable engagement surface and said axial end surfaces forming said second cable engagement surface.

14. The bicycle control cable fixing device according to claim 13, wherein each of said mounting portions of said support includes a wire receiving hole that is offset from said rotation axis, and said cam portion includes a wire receiving bore that is aligned with said wire receiving holes when said cable fixing member is located in said cable release position.

15. A bicycle component comprising:
a first member adapted to be coupled to a bicycle, said first member including a cable housing receiving recess adapted to receive an outer casing of a bicycle control cable; and
a second member movably coupled relative to said first member, said second member including a bicycle control cable fixing device fixedly coupled thereto, said bicycle control cable fixing device configured to non-movably retain an inner wire of the bicycle control cable thereto such that movement of the inner wire moves said

second member relative to said first member, said bicycle control cable fixing device including

a support member with a first cable engagement surface,
a cable fixing member non-threadedly supported on said support member to rotate about a rotation axis, said cable fixing member having a second cable engagement surface,
said cable fixing member and said support member being arranged and configured such that the inner wire of the bicycle control cable is secured between said first and second cable engagement surfaces in response to rotational movement of said cable fixing member.

16. The bicycle component according to claim 15, wherein
said first member includes a base member configured to be mounted to a bicycle frame element,

said second member includes a movable member with a linkage movably coupling said base member to said movable member, and a chain guide coupled to said movable member.

17. The bicycle component according to claim 16, wherein
said linkage includes an inner link and an outer link with said bicycle control cable fixing device is fixedly coupled to a substantially upwardly facing surface of one of said inner and outer links relative to the bicycle in a normal riding position.

18. The bicycle component according to claim 15, wherein
said cable fixing member includes a cam portion rotatably supported by said support member and an elongated lever portion extending radially outwardly from said cam portion relative to said rotation axis, said cam portion having said second cable engagement surface.

19. The bicycle component according to claim 18, wherein
said support member includes a base portion coupled to said second member and a pair of axially spaced mounting portions extending from said base portion with said cam portion of said cable fixing member rotatably supported between said mounting portions.

20. The bicycle component according to claim 19, wherein
said cam portion includes a pair of axial end surfaces and a peripheral cam surface concentrically arranged relative to said rotation axis and extending between said axial end surfaces, and
said base portion includes a peripheral retaining surface disposed relative to said peripheral cam surface to retain said cable fixing member relative to said support member when in said cable fixing position and the inner wire is retained between said support member and said cable fixing member.

21. The bicycle component according to claim 20, wherein
said peripheral retaining surface of said base portion includes said first cable engagement surface, and
said peripheral cam surface of said cam portion includes said second cable engagement surface.

22. The bicycle component according to claim 21, wherein
at least one of said peripheral retaining surface and said peripheral cam surface includes a groove adapted to at least partially receive the inner wire of the control cable therein.

23. The bicycle component according to claim 21, wherein
said peripheral retaining surface and said peripheral cam surface are arranged and configured to form a space therebetween when said cable fixing member is located in said cable fixing position, said space being configured to be smaller than a transverse dimension of the inner wire of the control cable such that the inner wire is squeezed between said peripheral retaining surface and said peripheral cam surface to non-movably couple the inner wire to said bicycle control cable fixing device when said cable fixing member is moved to said cable fixing position from said cable release position.

24. The bicycle component according to claim 21, wherein
said cam portion of said cable fixing member is rotatably mounted on a pivot pin that extends between said mounting portions of said support member.

25. The bicycle component according to claim 20, wherein at least one of said mounting portions includes an axial retaining surface forming said first cable engagement surface and disposed opposite to one of said axial end surfaces, which forms said second cable engagement surface, said axial retaining surface being spaced from said axial end surface by a distance to squeeze the inner wire therebetween.

26. The bicycle component according to claim 25, wherein said peripheral cam surface is configured and arranged to contact said peripheral retaining surface when said cable fixing member is located in said cable fixing position to frictionally prevent movement of said cable fixing member about said rotation axis.

27. The bicycle component according to claim 26, wherein said at least one of said mounting portions having said axial retaining surface includes a wire receiving hole that is offset from said rotation axis, and said cam portion includes a wire receiving bore that is aligned with said wire receiving hole when said cable fixing member is located in said cable release position.

28. The bicycle component according to claim 25, wherein said cam portion is freely rotatably mounted on a pivot pin that extends between said mounting portions of said support member.

29. The bicycle component according to claim 20, wherein each of said mounting portions of said support member includes an axial retaining surface disposed opposite to one of said axial end surfaces of said cam portion, said axial retaining surfaces forming said first cable engagement surface and said axial end surfaces forming said second cable engagement surface.

30. The bicycle component according to claim 29, wherein each of said mounting portions of said support member includes a wire receiving hole that is offset from said rotation axis, and

said cam portion includes a wire receiving bore that is aligned with said wire receiving holes when said cable fixing member is located in said cable release position.